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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,483	08/14/2001	Wataru Sasaki	32739M054	7895

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EXAMINER

LEE, TOMMY D

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/928,483

Applicant(s)

SASAKI ET AL.

Examiner

Thomas D. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 10-14, 17-21, 24-28 and 31-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-6, 13, 14, 20 and 21 is/are allowed.
- 6) ☒ Claim(s) 1-3, 10-12, 17-19, 24-28 and 31-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 20, 2005 has been entered.

Response to Amendment

2. This Office action is responsive to applicant's amendment filed December 20, 2005. Claims 1-6, 10-14, 17-21, 24-28 and 31-38 are pending.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 24-28, 37 and 38 are rejected under 35 U.S.C. 101 because these claims define a "signal" modulated with functional descriptive material. While functional descriptive material may be claimed as a statutory product (i.e., a "manufacture") when embodied on a tangible computer readable medium, a "signal" per se does not fall within any of the four statutory classes of 35 U.S.C. §101. A "signal" is not a process because it is not a series of steps per se. Furthermore, a "signal" is not a "machine", "composition of matter" or a "manufacture" because these statutory classes "relate to structural entities and can be grouped as 'product' claims in order to contrast them with

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process claims.” (1 D. Chisum, Patents § 1.02 (1994)). Machines, manufactures and compositions of matter are embodied by physical structures or material, whereas a “signal” has neither a physical structure nor a tangible material. That is, a “signal” is not a “machine” because it has no physical structure, and does not perform any useful, concrete and tangible result. Likewise, a “signal” is not a “composition of matter” because it is not “matter”, but rather a form of energy. Finally, a “signal” is not a “manufacture” because all traditional definitions of a “manufacture” have required some form of physical structure, which a claimed signal does not have.

A “manufacture” is defined as “the production of articles for use from raw materials or prepared materials by giving to these materials new forms, qualities, properties, or combinations, whether by hand-labor or by machinery.” *Diamond v. Chakrabarty*, 447 U.S. 303, 308, 206 USPQ 193, 196-97 (1980) (quoting *American Fruit Growers, Inc. v. Brogdex Co.*, 283 U.S. 1, 11, 8 USPQ 131, 133 (1931)).

Therefore, a “signal” is considered non-statutory because it is a form of energy, in the absence of any physical structure or tangible material, that does not fall within any of the four statutory classes of 35 U.S.C. §101.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-3, 10-12, 17-19, 24-26 and 31-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,778,276 (Hasegawa) in view of U.S. Patent

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6,859,287 (Fredriksen et al.), and further in view of either U.S. Patent 6,304,681 (Akiba et al.) or U.S. Patent 6,411,743 (Koh et al.).

Regarding claims 1-3, Hasegawa discloses a scanner system comprising an image scanner for scanning an image of an original (image reading unit 3 (column 5, lines 12-18)) and a control device for controlling the image scanner (system control unit 2 including CPU (column 5, lines 8-11)), wherein the control device includes: first setting means for accepting input of a scanning starting location and a scanning ending location for setting a reading area (CPU determines size of original document by receiving signals from detect sensors 81, 82, 83 (column 9, line 63 - column 10, line 23)); second setting means accepting input for setting a direction of the original (detect sensors output signals, enabling the CPU to determine size and direction of original document (column 10, lines 28-42., Fig. 9)); and scanning instruction means for designating a reading area of the original based on the inputs of the reading size and the direction of the image of the original that have been accepted by the first and second setting means and outputting a scan execution instruction to the image scanner (system control unit controls limits of an effective area for preliminary scanning motion based on size and direction of the original document as detected by the detect sensors (column 18, line 53 - column 19, line 3)). The scanning instruction means designates the reading area such that an end pad of an area readable by the image scanner coincides with an end pad of the reading area (image reading unit receives instruction from system control unit to move a mirror unit mounted on the image reading unit, for a

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distance corresponding to the longitudinal limit of the detected size (column 18, line 62 - column 19, line 3)).

Hasegawa does not appear to disclose operator manual input by said first and second setting means; or a third setting means for accepting input of a scanning starting location and a scanning ending location for setting a reading area, wherein the scanning instruction means designates an area that has been set by the third setting means as the reading area. Operator manual input is disclosed in Frederiksen et al. According to Frederiksen et al., reading size of the original (document size) as well as direction of the image of the original (page orientation) may be detected automatically, or may be set manually by means of an original settings button (Abstract; column 4, lines 1-10). The original settings button, when combined with the teaching of Hasegawa, would provide first and second setting means for manually setting a size (start and end scanning locations inherently determined according to the document size) of a document to be scanned, along with the setting means for automatically determining a size and direction of a document in Hasegawa. Manual selection of a document size and orientation allows a user to override automatic size detection by detecting sensors, in case copying of irregularly shaped documents is required (column 3, lines 9-19), thus enhancing the versatility of the scanner system. Therefore, it would have been obvious for one of ordinary skill in the art to modify the teaching of Hasegawa by providing for manual selection of document size, as disclosed in Frederiksen et al.

Hasegawa in view of Fredriksen et al. do not disclose a second setting means including a combination pattern providing means for providing a plurality of combination

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patterns made by combining a figure of an original as viewed by an operator and the direction of the image of the original as viewed by the operator, and a selecting means accepting operator manual input for selecting one of the plurality of combination patterns. Both Akiba et al. and Koh et al. disclose apparatuses that provide a display of patterns corresponding to an original image to be read, the patterns combine a figure and direction of an original as viewed by an operator, as well as means for selecting one of the combination patterns via manual input (Akiba: column 4, line 61 – column 5, line 21, Figs. 5 and 6; Koh et al.: column 18, lines 46-61, Fig. 23). One of ordinary skill in the art would have recognized that providing combination patterns of original orientations, such as disclosed in either Akiba or Koh et al., would enable an operator to visually determine which representation should be selected for image scanning and printing, thereby making it less likely for an undesired orientation to be accidentally selected. Therefore, it would have been obvious for one of ordinary skill in the art to modify the combined teaching of Hasegawa and Fredriksen et al., by including a combination pattern providing means such as disclosed in either Akiba or Koh et al.

Claims 10-12, 17-19, and 24-26 are similar in scope to above-rejected claims 1-3, except that claim 10 recites a scanner driver installed in a computer connectable to an image scanner, claim 17 further recites a recording medium readable by the computer, and claim 24 recites a signal transmittable via a communication line being modulated by data corresponding to the scanner driver installed in the computer. These limitations read on the system control unit of Hasegawa. The system control unit, which includes a CPU, RAM and ROM (column 5, lines 8-11), communicates signals with

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image reading unit 3, image processing unit 4 and mechanical drive unit 11 (Fig. 1A) for performing size and direction of an original document according to a program stored in ROM (column 5, lines 23-28).

Regarding claims 31, 33, 35 and 37, both Akiba and Koh et al. disclose providing the plurality of combination patterns made by combining a figure of a generally rectangular shaped original as viewed by an operator and the direction of the image of the original as viewed by the operator (Akiba: Figs. 5 and 6; Koh et al.: Fig. 23). In particular, Akiba shows a first pattern combining a figure of the original with a shorter side thereof at a top and a direction of the image of the original directing upward (portrait original on the left in Fig. 5), a third pattern combining a figure of the original with the longer side thereof at a top and a direction of the image of the original directing upward (landscape original on the right in Fig. 5) and a fourth pattern combining a figure of the original with the shorter side thereof at a top and a direction of the image of the original directing leftward (landscape original on the far right in Fig. 6). A second pattern combining a figure of the original with a longer side thereof at a top and a direction of the image of the original directing leftward (portrait original) would be shown on the display in Fig. 6 if the landscape original shown in Fig. 5 is selected (column 5, lines 13-16).

Claims 32, 34, 36 and 38 basically recite the limitations of claims 31, 33, 35 and 37 (which include the limitations of base claims 1, 10, 17 and 24, respectively), excluding selecting means as part of the second setting means. These claims are

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rejected for the reasons set forth above with regard to claims 1, 10, 17, 24, 31, 33, 35 and 37.

Allowable Subject Matter

6. Claims 4-6, 13, 14, 20 and 21 are allowed.

7. Claims 27 and 28 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101 set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter: No prior art has been found to disclose or suggest applicant's means for setting a scanning execution standby mode and transmission means, included in scanning instruction means for designating a reading area of the original based on the inputs of the reading size and the direction of the original that has been accepted by first and second setting means, as recited in base claims 4, 13, 20 and 27.

Response to Arguments

8. Applicant's arguments filed in response to the prior rejection of claims 1-3, 10-12, 17-19 and 24-26 under 35 U.S.C. 103(a), as set forth in the prior Office action, have been fully considered but they are not persuasive.

Applicant asserts that neither Hasegawa nor Fredriksen et al. disclose a setting means for manually selecting one of a plurality of combination patterns that are made by combining a figure of an original viewed by an operator and the direction of the image of the original viewed by the operator, or such combination patterns including a first, second, third and fourth combination patterns (pages 18-20 of the current amendment). Applicant's assertion is based on limitations newly added to the claims to

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overcome the prior rejection. These limitations are disclosed in both Akiba and Koh et al., as set forth above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas D. Lee whose telephone number is (571) 272-7436. The examiner can normally be reached on Monday-Friday, 7:30-5:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas D. Lee
Primary Examiner
Art Unit 2624

tdl
January 31, 2006